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A Self-Capitalization Model for Building Behavior Analysis Graduate Programs

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The development of the Behavior Analysis Program at the University of Nevada through self-capitalization is described. With this model, both doctoral and master's degree programs were established at almost no cost to the university. Some of the problems encountered along the way, including gaining support for the original proposal, attracting and retaining high-quality faculty, engendering support from the Department of Psychology and the university, developing resources, and balancing academic with entrepreneurial demands are discussed, as are the solutions we have found for those problems.

Key words: self-capitalization, behavior analysis training, graduate training

There was a time when behavior analysis programs could be established out of experimental programs or human service departments. Times have changed. Despite the need for them, graduate programs in behavior analysis don't spring up like they used to, both because of limited resources and the political realities of modern departments of psychology. Facing this problem at the University of Nevada, we made the department an offer they couldn't refuse. We offered to establish a doctoral program and a professional master's program in behavior analysis at virtually no cost to the university. We now have a nationally visible and growing Behavior Analysis Program. This paper describes how it was done.

THE CORE IDEA: SELF-CAPITALIZATION

Our first idea was to have state agencies that needed trained behavior analysts fund the program. Even before approaching the department we spoke to state administrators, such as the head of the state's Division of Mental Hygiene and Mental Retardation. After several abortive attempts to obtain the needed funds from state agencies, it became clear that this would not work. But we learned that these agencies were already paying private, not-for-profit vendors for services that behavior analysts knew how to deliver. The essence of our final plan came together: The university would become a vendor. By delivering needed services to the state and community on a fee-for-service basis, we would generate revenue for faculty salaries, student stipends, and the other costs of mounting and running the program. Faculty would manage these programs, and students would be trained in them.

Because we wanted a graduate program of behavior analysis, not just another behavioral service agency, faculty roles would be just like those of other faculty members in the department, and they would be evaluated for merit raises and promotions using the same standards and procedures. Faculty would have office spaces in the Department of Psychology, would have normal faculty voting rights, and would participate in department and university committees. There were only two differences: These lines would be nontenure track, and behavior analysis faculty would run applied programs to pay for their salaries.

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The Proposal

The plan itself was more than a year in the making, and was based on numerous meetings with heads of human service divisions in the state government, university administrators, and department faculty. The formal proposal to the Department of Psychology outlined the academic curriculum, the funding model, the potential benefits to the department and the university, and foreseeable problems. To make it easy to say "yes," the proposal requested only probationary approval of the program for 5 years. To attain permanent status, the program had to (a) attract and retain qualified students in numbers sufficient to sustain it, (b) contribute to the well-being of other departmental programs, (c) be mounted with the resources envisioned, and (d) generate continued state support and the placement of students in positions appropriate to their training.

The Five-Year History of the Program

When the plan was approved, we admitted three doctoral students and one master's student during our first year of operations. The program had only one full-time faculty member, but it was possible to mount the curriculum because of the involvement of other faculty in the department and practicum supervision and occasional teaching from behavior-analytically oriented psychologists in the community and from other units in the university.

The program generated $56,000 that first year, all from the State Division of Mental Hygiene and Mental Retardation. Their most pressing need was day training for a small number of mentally retarded adults with extremely challenging behaviors. These individuals had not been successfully integrated into other community-based service delivery programs because the technical expertise to deal with their challenging behaviors had been lacking. Graduate and undergraduate students, working for academic credit in practica or field experience classes, provided the services under the direction of the program director. The graduate school awarded a half-time graduate assistantship for 1 year as a start-up investment, and two other half-time assistantships were generated from program funds, such that each of the doctoral students had partial funding.

At the beginning of the second year, the university picked up one seventh of the program director's salary, and one fifth was absorbed by the newly funded Nevada University Affiliated Program (a federally funded disabilities assistance program). During this year we developed a new service project to help people with developmental disabilities obtain employment, which was funded by a federal grant and by the state. We admitted another cohort of five students, each of whom received some funding from two applied projects. By the end of the second year program revenue had increased to approximately $175,000, making it possible to hire a second full-time faculty member. We graduated our first master's student that year, and hired our first administrative staff member.

The presence of a new member on our team brought in new sources of funds and permitted diversification of activities by the existing member. A number of new consultations were established, among which were contracts with two county school districts to provide behavioral consultation to special education teachers, a contract for technical support to the local Association for Retarded Citizens, and a training and support contract with a large not-for-profit corporation in Illinois. Our day training and supported employment projects continued to grow. By the end of the third year, program revenues had increased to $250,000. We hired additional support staff, but struggled through another year without hiring another faculty member.

By the fourth year, the applied programs were successful enough to pay for research assistants for the faculty. In recognition of our self-capitalization

efforts, we were permanently awarded another half-time graduate assistantship by the College of Arts and Science. We brought in $350,000 that year. In the fall of 1994 we hired our third member to spearhead our service delivery programs in developmental disabilities. There were now nine master's students and 15 doctoral students in the Behavior Analysis Program. A new project for autistic children was launched this year in connection with Ivar Lovaas's program in Los Angeles. The day training and supported employment programs had grown considerably, and all of our other contracts had been sustained. In addition, we took on the task of comparing a personalized system of instruction (PSI) to traditional lectures in the department's chronically poorly rated introductory psychology classes.

That same fall the program was taken off probation. This was not politically difficult because every criterion had been clearly met (confirming the wisdom of our original decision to create very specific criteria for judging success). Program revenue had grown to approximately $500,000. We had 29 graduate students and two administrative staff members, and were searching for a fourth faculty member. We were by now being regularly used by upper administrators to show how innovative the university was in dealing with budgetary shortfalls. When the budget crunch eased for 1995–1996, we were awarded an additional 0.5 of a hard-money faculty line, 1.5 new graduate assistantships from the University, and over 11,000 square feet of space in a newly acquired building for the administration of our service delivery projects. When we showed how much better PSI did compared to the traditional teaching method in Psychology 101, additional support for this project was provided by the university, including $18,000 in faculty salary support.

The growth of the program, in terms of number of students and financial revenues, is shown in Figure 1. As we enter our sixth year we are in the process of negotiating new projects. We are developing a national presence (e.g., we will be delivering our master's degree program to a cohort of 25 students in a large agency in Illinois), and are pursuing international possibilities. In short, it worked. We believe this same formula could work in many other locations across the country. There is no reason why the behavior-analytic community cannot create new doctoral programs or why existing programs cannot increase substantially in size. This would have a tremendous

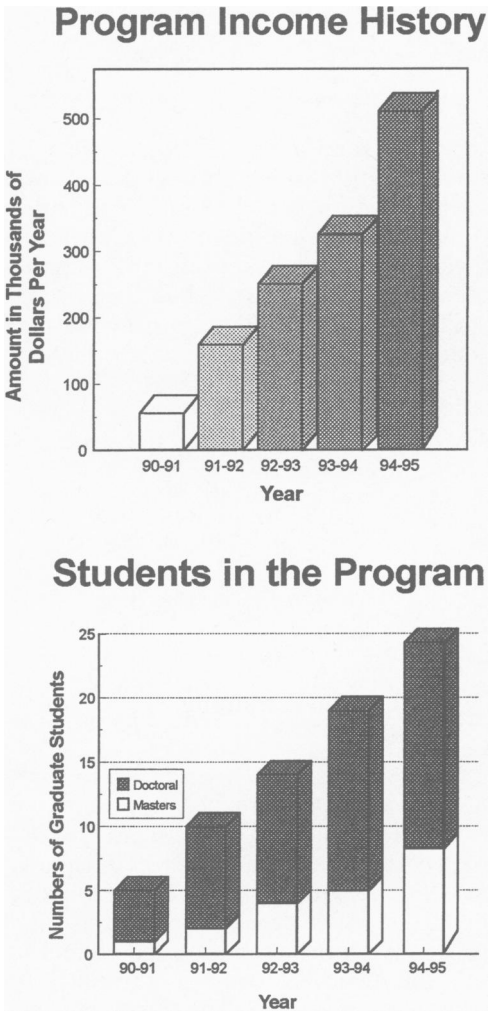


Figure 1. The growth of the University of Nevada Behavior Analysis Program, shown in terms of revenues and number of students.

impact on the field of behavior analysis.

PROBLEMS AND SOLUTIONS

In the section that follows, we will review the problems this model of program development presents and solutions that we have developed. Some of these solutions we are only now implementing, but most of what we have to say in this section has been tested and found to be useful, at least in our setting.

Gaining Support for the Original Proposal

We were able to launch the program with very little opposition. The department had a behavioral tradition (due to Willard F. Day), but at the time of the proposal there were only a few behaviorally oriented faculty in the department and all were in the clinical program. Three factors seemed to be most helpful.

Propose low initial costs. In the initial phase of program development, we asked for almost nothing from the department, other than their willingness to allow us to try to succeed on our own. Our consistent approach was (and is) to give more than we receive and to ask for resources only on the basis of program success. By making increased resources only a vague and remote consequence of success rather than a specific, necessary, and difficult antecedent to it, the department was in a position to vote on the idea of a successful program rather than on the need to divert existing resources to such a program.

Do your homework. A great deal of political work was done to make sure that the support was there for the proposal, including repeated individual meetings with almost all of the psychology faculty, repeated drafts of the proposal, meetings with all the major university administrators, meetings with agency heads and others who might provide support for the project, and so on. In the meeting in which the program was approved, one experimental faculty member joked that he was voting positively "just to keep Steve from coming to my office again."

Help everyone win. By agreeing to good citizenship as a component of the evaluation criteria, we made clear our intention to help, not threaten, other programs. For example, we made clear that behavior analysis faculty would teach courses outside of the behavior analysis core, and would help to fund students from other programs.

Attracting High-Quality Students

Training programs cannot exist without students, and attracting students to a brand new program requires strategies of student recruitment and retention that differ from those of more established programs. Our first students were primarily high-quality undergraduates from the University of Nevada who were actively recruited on the basis of class performance. Initially, we also recruited very heavily from colleagues and friends.

Take some calculated risks. The program was willing to take some risk on students who were known to be hard working and capable but who had only acceptable standardized scores. On average, however, we were careful not to admit students with graduate record exam scores and grade point averages below the generally accepted standards of other programs in the department, because this could have created long-term political problems for the program regardless of the actual success of these students.

Student funding and information. An advantage of our funding model is that financial support was available to all students almost immediately. The program also adopted a thorough admissions procedure including, most especially, a day-long interview with the program faculty and students. The self-capitalization model is a very demanding one for graduate students, and they must be made aware of its challenging

nature. The interview also gives potential students an opportunity to feel the excitement and camaraderie that exists within the program, which is probably its single most attractive feature to potential students.

Attracting High-Quality Faculty

Potential faculty do not readily understand the self-capitalization approach to program development. Most people in the academic community view soft money lines as temporary, year-to-year positions. The model we are describing produces true faculty lines that are "semi-soft" because they are permanent as long as the program succeeds. When these distinctions are made and appreciated, many faculty find the total package attractive. We are careful to hire faculty in a formal, dignified process that involves a full search committee with members from other departmental and university programs, visits from a number of candidates, and a full departmental vote.

Hire faculty with broad interests. We have sought faculty who have had broad rather than narrow training. We are a behavior analysis program, not just an applied program. We have avoided faculty with sole interests in basic behavior analysis, or applied behavior analysis, or behavioral philosophy—we want all three. If projects collapse, faculty will have to develop new ones, and narrowly trained faculty are inherently less able to do so.

Sustaining Students

Active efforts are required to sustain students in the very challenging roles they must acquire in this program model. The need for adequate financial support is especially important because the high program demands will not permit extensive outside work to supplement finances. We have been careful to pay for tuition and fees in accord with the standard set by other programs within the department and have been able at times to supplement student assistantships with additional work in the summer, travel support, research support, equipment, and office space.

Team building. Even more than the financial support, however, is the emotional support that comes from a sense of team spirit and positive relations within the program. We have adopted a number of methods to foster this, such as having hospitality suites at conventions, helping with the Behavioral Follies at ABA, taking group pictures of the students and faculty, hosting frequent parties, and the like. In our junior colleague model, students are treated as professionals in training and not as social and intellectual underlings. Students are well aware of the financial arrangements that sustain the program and are regularly informed of the financial picture.

Another critical factor in sustaining students over the medium and long term is helping them to see where they fit in the overall profession. We maintain a strong basic and applied research emphasis. We involve students in projects as coauthors, even if they are being paid to perform this work. A fairly large number of students go to regional and national conventions together and are able to assess how their training has prepared them compared to students in other programs. The combination of all these factors means that students feel part of a team, know that everyone is counting on them, see that what they are doing is viewed as important, and realize that their preparation is solid.

Sustaining Faculty

It is not yet clear that the model we have described can be sustained indefinitely with all of the work demands that it places on program faculty. We have been able to sustain faculty by building a strong team in which everyone's success depends upon the group pulling together. Faculty members review financial information on the program regularly and in a group setting so that everybody knows exactly which programs and projects are work-

ing and which ones are not yet carrying their weight. They receive teaching credit for the various practicum supervision and project administration duties, such that their formal classroom teaching loads are somewhat lower than other faculty in the department, but their overall teaching load is not. In addition, as resources have become available, the faculty have been given research assistants to enable them to pursue their research interests more vigorously. Finally, the faculty socialize together fairly regularly and find opportunities to celebrate the success of the program.

When new faculty are hired, we place them into established projects. In this way, junior faculty can generate their salaries fairly easily by managing existing projects successfully rather than immediately having to launch a new project. Faculty are expected over time to develop their own projects, grow their programs, submit grants, and find other forms of outside financial support.

Engendering Support from the Department

Developing and maintaining support from the department is perhaps the most challenging aspect of the self-capitalization approach. Faculty in the Behavior Analysis Program have regularly taught courses outside the behavior analysis curriculum at the graduate and undergraduate levels. The number of credit hours generated, and its financial impact on the university, are shown in Figure 2. Behavior analysis faculty participate in departmental administration and serve on department and university committees. They are also subject to the same evaluation and merit procedures as are in effect for other faculty (e.g., if there is a salary freeze, the behavior analysis faculty are also subject to the freeze even if program money is available). Finally, the program has always been careful to take care of its own administrative needs and most of its student support.

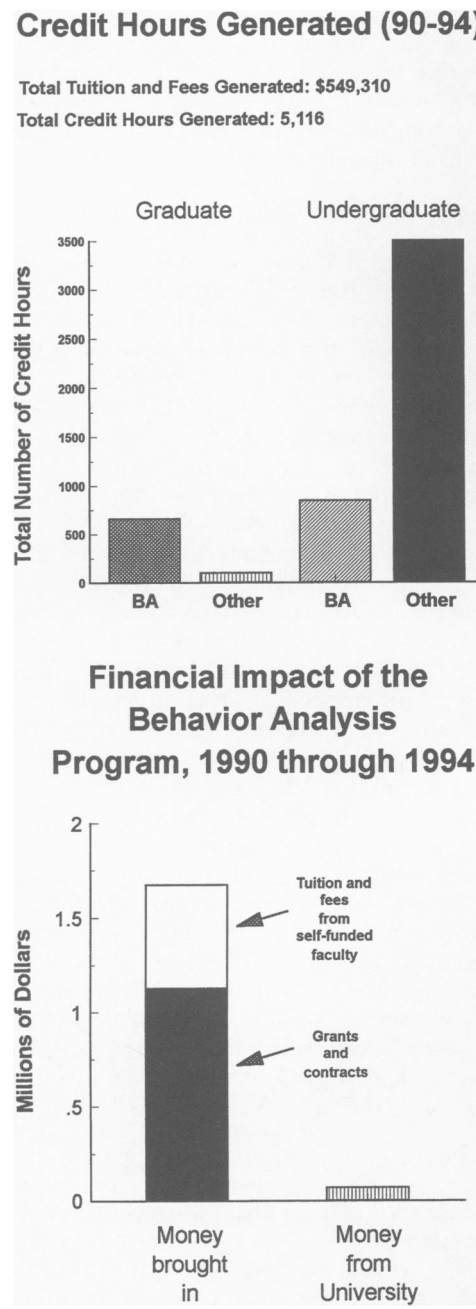


Figure 2. The impact of the University of Nevada Behavior Analysis program on credit-hour production and financial input to the university.

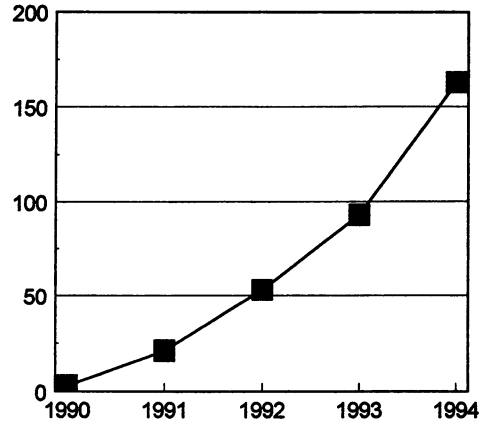
Space. We have made sure that behavior analysis faculty have offices in

the same area as other faculty and, even if we've had to pay for it ourselves, that these offices and are equipped with proper phones, computers, and the like. Other space needs, however, initially have been met through outside agencies or through space temporarily vacated by other programs. By going slowly, the program has acquired adequate and permanent space over a period of several years without unnecessary rancor.

Good citizenship. Wherever possible we've looked for ways to help the other programs. For example, if the experimental program is trying to recruit a student and we are able to offer some financial support for that student, we have been quite willing to do so even though we might have thought first to support a behavior analysis student. Many graduate students from other programs have been supported.

Routine evaluation. Finally, we have developed a rigorous approach to program evaluation by keeping careful record of publications and presentations, student qualifications, student attrition, the speed with which students proceed through the program, and so on. Examples of data of this kind are shown in Figure 3. Such data have enabled us to give very detailed presentations on the financial and educational success of the program and its impact on other aspects of the department and the university. In addition to the impact of the data themselves, the fact that such detailed records are being kept reassures faculty that the program is proceeding responsibly.

Cummulative Total Presentations by Students in Behavior Analysis



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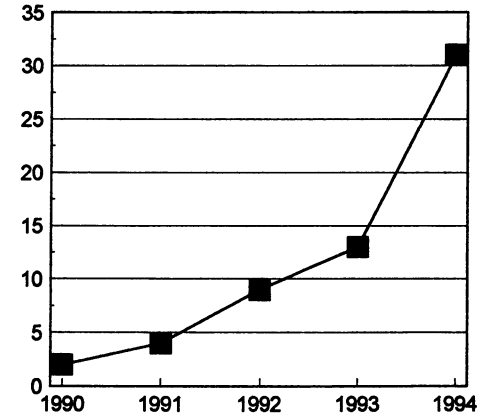

Figure 3. The academic productivity of graduate students in the University of Nevada Behavior Analysis Program.

Engendering Support from the University

We have looked for opportunities to bring the administration into the process of program development. We meet at least yearly if not more often with high-level administrators such as the Dean of the College, the Academic Vice President, and the Associate Vice President for Research to reiterate our model of program development and to show program outcome data. These meetings have served to bring the program to mind as issues arose in the state legislature having to do with such things as university outreach efforts, distance learning, undergraduate externship experiences, how the university has dealt with budget cuts, and so on.

Know your institution's priorities. It is important to understand the objectives of middle- and high-level admin-

istration within the university and to articulate program achievements in terms of those objectives. For example, the Behavior Analysis Program gave a presentation to the Board of Regents to show the university's creativity in minimizing the impact of state budget cuts. Our PSI initiative is being used to explain how innovative efforts are being made in the core curriculum. Our off-campus master's program is being used as an example of distance learning and of the need for more money to be spent on networking technology.

Indirect costs. Administrative support has been helpful in securing waivers of normal indirect costs on fee-for-service contracts. We have been able to show administrators that the tuition and fees generated by the courses we are teaching exceed in financial benefit to the university the normal indirect costs that would be expected in our contractual arrangements (see Figure 2).

Funding for results. Administrators are accustomed to hearing the constant financial moans of department chairs and program administrators. Our message is extremely unusual and provides welcome relief: We will achieve your goals, and when we do we will want a specific amount of resources to help sustain our effort. The advantages of this "funding for results" approach is actively pointed out by us to administrators, who thereafter use it to deflect resource demands from others. When behavior analysis is publicly used as an example of that kind, the commitment to the program by the administration increases accordingly.

Developing Resources

The key to the self-capitalization model is the development of relations with agencies and institutions outside the university, and occasionally within the university, for the provision of needed services. We have been willing to go wherever the financial and service needs lead us, as long as what we are doing is part of the professional role of behavior-analytically oriented psychologists. It is surprising how often agencies face problems that no one wants to help them solve, even if the funds are available. We meet regularly with heads of state or regional agencies, and our approach to them is always the same. We want to know what their most difficult problems are. This approach reassures agencies who have been disappointed by the university in the past and helps to avoid any sense of competition with existing agencies.

Never for free. Training programs are often in the ludicrous position of begging for practicum sites from reluctant agencies. Community agencies often fail to appreciate how much financial benefit is actually being provided to them through student labor. To combat this attitude, we have been careful never to give away student resources for free. We would rather work with other agencies or launch our own programs, hire our own students, and pay them what they're worth.

Balance

The self-capitalization approach requires a kind of balancing act in several areas.

Grants versus contracts. Grants are important, but they cannot be a complete replacement for fee-for-service contracts because grants lead to buyouts that make it difficult to mount the curriculum. The political and research benefits of grant production have to be balanced with the long-term program benefits of fee-for-service contracts.

Business versus faculty roles. The normal faculty role has to be balanced with the business role of faculty in this model. We have refused to modify the academic standards for behavior analysis faculty simply because they are also very busy generating their own salaries. Anything else would mean a two-tier system, with behavior analysis faculty in a second class. That would be lethal to the long-term viability of any program in a self-respecting department. The solution has been to find

ways of integrating these roles. For example, research can be done within the service delivery program run by the faculty member, or organizational management practica can help to run the program and produce course credit as well.

Working for the program versus outside consultation. Faculty very quickly learn how easy it is to develop consultation and outside funding arrangements. Faculty are tempted to increase their income by developing contracts outside of the program for themselves as individuals. We have discouraged this strongly, particularly if the consultation occurs within the same geographical location as the university. To do otherwise would mean that the Behavior Analysis Program would gradually have its initiative and creativity siphoned off into similar efforts under the individual faculty members. In fact, several times we have put consultation contracts, which quite legitimately could be secured and maintained by individual faculty, through the university instead. The short-term loss has been more than made up in the long-term gain of a viable program.

Regular faculty versus special faculty. The different roles required of behavior analysis faculty have occasionally led to suggestions that they should be treated as another category of faculty such as research faculty, clinical faculty, or administrative faculty. We have successfully resisted all of these attempts. Behavior analysis faculty are viewed as regular faculty members. They have full voting rights within the department and the full slate of normal expectations of faculty. By doing this, the program has avoided being cordoned off into an intellectual corner of the department.

CONCLUSIONS

Behavior analysis has a body of knowledge, principles, and techniques that are of direct benefit to many areas of society. These areas will pay to have access to these benefits. This is unlike most divisions of academic psychology that would have a hard time justifying their existence on the basis of their usefulness to society. Behavior analysis as a field can and ought to use its utility to its advantage.

Our model is admittedly challenging and faculty must work very hard, but there is great benefit. As universities undergo budget cuts, we will be the last to feel the cuts because we depend so little on university funding. As department operating budgets are cut, we will be the last to feel the cuts because we get so little from the department and have learned to prosper on our own. As faculty lines stabilize and other programs are threatened or eliminated, ours will continue to grow. As student support slots become tight, ours continue to rise. As universities move to eliminate programs or remove tenure lines, we don't need to be concerned.

Our Behavior Analysis Program is now a formal part of the University of Nevada at Reno and a permanent part of the Department of Psychology. Over time, we will secure more hard money positions and more of the trappings of a usual doctoral program, but we have become acquainted with the benefits of the self-capitalization approach and even in the context of traditional forms of support, we are unlikely to abandon this approach. There is a useful contingency built into this model. If we perform well, we succeed and our faculty lines and program support are essentially permanent. Conversely, if we fail to work hard and to develop new ways of demonstrating the importance and relevance of our work, we will fail. As behavior analysts, that is as it should be.